

CLAIMS

1. A method for manufacturing a barbed stent, comprising:
providing a sheet of stent material;
cutting the sheet to form a stent segment with integral barbs
extending therefrom; and
forming the stent segment into a final stent shape having a
longitudinal axis.
2. The method of claim 1, further comprising orienting the stent
segment so that the barbs extend generally transverse to the longitudinal axis of
the final stent shape.
3. The method of claim 1, further comprising orienting the stent
segment so that the barbs form an acute angle to the longitudinal axis of the final
stent shape.
4. The method of claim 1, further comprising:
connecting a first end of the stent segment to a second end of the
stent segment.
5. The method of claim 3, further comprising:
connecting a first end of the stent segment to a second end of the
stent segment.
6. The method of claim 1, further comprising polishing the stent
segment.
7. The method of claim 1, wherein the cutting is performed with a
laser.
8. The method of claim 1, wherein the final stent shape is a zigzag
shape.

9. The method of claim 1, further comprising bending the barbs relative to the stent segment.
10. The method of claim 1, wherein the stent material is stainless steel.
11. A method for manufacturing a barbed stent, comprising:
providing a sheet of stainless steel;
cutting the sheet with a laser to form a stent segment with integral barbs extending therefrom;
electro-polishing the stent segment;
bending the stent segment to form a zigzag shape; and
soldering a first end of the stent segment to a second end of the stent segment.
12. A method for manufacturing a barbed stent, comprising:
providing a cannula of stent material;
cutting the cannula to form a stent ring with integral barbs extending therefrom; and
forming the stent ring into a final stent shape having a longitudinal axis.
13. The method of claim 12, wherein the stent ring is formed into a final stent shape so that the barbs extend generally transverse to the longitudinal axis.
14. The method of claim 12, wherein the stent ring is formed into a final stent shape so that the barbs form an acute angle to the longitudinal axis of the final stent shape.
15. The method of claim 12, wherein the final stent shape is a zigzag shape.
16. The method of claim 12, wherein the stent material is stainless steel.
17. The method of claim 12, further comprising polishing the stent ring.

18. The method of claim 12, further comprising bending the barbs relative to the final stent shape.
19. The method of claim 12, wherein the stent material is cut with a laser.
20. A method for manufacturing a barbed stent, comprising:
 - providing a stainless steel cannula;
 - cutting the cannula with a laser to form a stent ring with integral barbs extending therefrom;
 - electro-polishing the stent ring; and
 - bending the stent ring to form a zigzag shape.
21. A barbed stent for deployment within the body of a patient, comprising:
 - a wire having at least one bend;
 - wherein each of the at least one bend connects to at least two struts;and
 - barbs extending in a generally transverse direction from a longitudinal axis of the stent;
 - wherein the barbs are integral with the wire and configured to engage tissue adjacent the stent.
22. The stent of claim 21, wherein the wire is in a zigzag shape.
23. The stent of claim 21, wherein the barbs form an acute angle to the longitudinal axis.
24. The stent of claim 21, wherein at least one of the barbs is positioned on the at least one bend.
25. The stent of claim 21, wherein at least one of the barbs is positioned on each strut.

26. The stent of claim 21, wherein the barbs point in an approximately distal direction.

27. The stent of claim 21, wherein the stent is adjacent to a proximal end of an endoluminal prosthesis.

28. The stent of claim 27, wherein the at least two struts extend away from the proximal end of the endoluminal prosthesis in a proximal direction.

29. The stent of claim 28, wherein the endoluminal prosthesis is adapted to be deployed at least partially within the aorta, so that the stent can extend at least partially above a renal artery when the prosthesis is implanted.

30. The stent of claim 29, wherein the prosthesis is a bifurcated aortic prosthesis.

31. An endoluminal prosthesis, comprising:
a substantially cannular body having proximal and distal ends; and
a stent affixed to the substantially cannular body near the proximal end;

wherein the stent has integral barbs extending therefrom, and
wherein the stent and the integral barbs are configured so that they can engage tissue adjacent to the stent when the endoluminal prosthesis is deployed.

32. The endoluminal prosthesis of claim 31, wherein the substantially cannular body is bifurcated.

33. The endoluminal prosthesis of claim 32, wherein the substantially cannular body is configured for deployment at least partially within an aortic lumen.